Consulting with Teachers Regarding Academic Skills: Problem Solving for Basic Skills

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Abstract

A number of issues must be addressed in order to intervene with academic problems within classrooms. These issues include screening, problem specification, problem function, solving the problem, and subsequent problem evaluation. Although the addition of a consultant will allow services to be delivered to greater numbers of children than could be affected through direct service by the consultant, indirect service delivery creates issues that will have to be addressed in order for services to be effective. These issues are discussed in terms of assessment as well as the determination of curriculum levels within classrooms in consultation with the classroom teacher. Key Words: Academic Skills, Screening, Problem Solving, Problem Specification, Problem Function

Current models of school consultation are largely an outgrowth of Caplan's mental health consultation model, which began in Israel in 1949. In response to an enormous caseload of 16,000 immigrant children in more than 100 residential institutions, child psychiatrist Gerald Caplan realized that a traditional refer/diagnose/provide therapy model would not work in the face of the 1,000 referrals received per year within the limited resources that were available using a traditional direct service model (Caplan, Caplan, & Erchul, 1995). An alternative, indirect model of service delivery was developed, in which caregivers or consultees and referred children met with staff members at their institutions with the goal of improving caregivers' functioning (Caplan et al.), and consequently, children's functioning. This indirect service format allowed staff the capacity to have a positive effect on a far greater number of children than if direct service delivery had been the only option.

Subsequent to the genesis of consultation in the mental health field, major changes in the role of school psychologists have been called for: from that of assessment and primary gatekeeper for special education eligibility determination toward that of solving problems and meeting students' needs (Bradley-Johnson & Dean, 2000). Some of the changes that have been recommended to effect this major alteration in job responsibilities include an emphasis on preventing problems before they start and the application of scientific principles to problems encountered in schools (Dwyer & Bernstein, 1998). Indeed, this era of increasing accountability and school reform has led to a focus on providing as much individualized service as needed not only to students with disabilities through the Individuals with Disabilities Education Improvement Act (IDEA, 2004), but to all students based on the demands of No Child Left Behind Act (NCLB, 2001), by requiring that schools demonstrate adequate yearly progress (AYP) in the achievement of all students (Shippen, Houchins, Calhoon, Furlow, & Sartor, 2006). This is a challenging goal for schools whose resources are often stretched thin by the myriad requirements of accountability systems. As a result, schools are more interested than ever in improving the efficiency and effectiveness of the professional practices of the educators they employ. There are just too many students in need of services for each to have direct service from a school psychologist (Bradley-Johnson & Dean, 2000), especially given projected shortages of school psychologists (Curtis, Grier, & Hunley, 2004; Curtis, Hunley, & Grier, 2004). Consultation is a model that permits services to be provided to many students with the goal of enhancing the effectiveness of the services students already receive and that has amassed a considerable supportive literature in schools (Gutkin, 1996; Sheridan, Welch, & Orme, 1996). We use some of the same principles that guided Caplan almost 60 years ago to improve outcomes for a greater number of students than we might otherwise be able to affect using direct service delivery.

As the role of the school psychologist has changed over the past half century, indirect service has come to include a variety of activities in addition to consultation that are undertaken in an effort to improve children's outcomes: research, the development of systems change programs, and professional development (Bradley-Johnson & Dean, 2000). Indeed, school psychologists report that consultation is a preferred service and that they would prefer to increase the amount of time they spend providing the service (Cheramie & Sutter, 1993; Costenbader, Swartz, & Petrix, 1992; Hatzichristou, 1998; Kratochwill & Stoiber, 2000; Reschly & Wilson, 1995; Roberts & Rust, 1994; Stewart, 1986), as the systemic implementation of such services can be a practical method for meeting the needs of students and teachers (e.g., Ikeda, Tilly, Stumme, Volmer, & Allison, 1996). A vulnerability of this service delivery model is that it presumes that teachers have access to the resources needed to implement interventions developed in a consultation. These include skills, time, space, and material resources. If teachers do not possess those fundamental skills, the intervention is unlikely to be implemented as designed and will lead to no positive outcome for the student due to a lack of procedural or treatment integrity (Sechrest, 1982; Yeaton & Sechrest, 1981). The development and maintenance of system supports to bolster teachers' ability to manage their teaching and service provision responsibilities is a critical function performed by school psychologists. In addition, it is important that school psychologists provide instruction and feedback to the teacher regarding assessment, intervention, and evaluation for student concerns when those activities are essential to the success of the intervention designed in consultation.

Academic Skills and Social Behavior

Nearly every imaginable concern about students and schools could potentially be addressed in consultation with teachers. A survey of 391 school psychologists published in 2002 indicated that reading problems were the cause of their most common referrals at 57%, followed by written expression at 43%, task completion at 39%, mathematics at 27%, conduct at 26%, and motivation at 24% (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002). In a study of interventions developed in consultation with teachers, reading skills, attention to task, and noncompliance, respectively, were the most frequent primary concerns (Noell, Gansle, & Allison, 1999). Concerns in reading are common with those who are identified for special services as well. It is very common for special education identification of students with mild mental retardation to occur in the second or third grade, when academic work becomes more difficult (Heward, 2006), especially in reading. Indeed, 90% of children identified as learning disabled are referred for reading problems (Kavale & Forness, 2000).

Despite the apparent clarity of these referral concerns, it often seems that concerns presented in consultation sessions are not that simple; behavior, of course, does not exist in a vacuum. When a referral concern is brought up in consultation, it is not always possible to know immediately why that problem occurs; the reasons why students do not achieve certainly are multifaceted (Daly, Witt, Martens, & Dool, 1997). It may be critical to clarify the external forces that interact with the primary presenting problem before it is wise or perhaps even possible to design a plan of quality sufficient to ameliorate it.

The Big Questions of School Consultation

Once the teacher has brought a concern to the attention of a consultant, several questions are wont to be answered, usually in sequence, with the answer to the earlier questions guiding the direction of the activities related to later questions. First: Is there student centered problem? This suggests that information must be gathered to describe group level functioning (i.e., the classroom) and describe the extent to which the concern is evident in the student and/or the class as a group. Additionally, some consideration of more general expectations can be helpful. For example, if a student is the lowest performing reader in his class, but is still above reasonable instructional criterion benchmarks, intervention may not be warranted. Second: What are the details that are relevant to the concern? We may know that the child is failing English-language arts, but this level of information is insufficient to

design an intervention. Third: What should be done about the problem? For example, noncompliance may have been the presenting concern. However, noncompliance may allow escape from a demand for the student to finish assignments that she does not have the skills to accurately complete. Academic skills would be indicated as the logical target for remediation using instruction, rather than a consequent-based intervention for acting out. Fourth: We've decided what to do, now how do we actually get it done? And fifth: How do we know whether we have achieved the goals we set in consultation?

It is important to be wary of making instructional decisions without rules to guide them (Demaray & Elliott, 1998; Hoge & Coladarci, 1989; VanDerHeyden & Witt, 2005), as human judgment certainly is fallible. And, despite the fact that a standardized, norm-referenced assessment of student achievement might seem as though it would yield data sufficient to inform intervention development, in reality, it will allow only comparison of students' skills to other students of similar age or grade. Due to the stability and reliability built into their design, the cost and length of time to administer, the limited number of items covering wide academic skill spans, and its lack of validity for treatment planning, these tests are inappropriate for monitoring progress over time (Cone, 1989; Hayes, Nelson, & Jarrett, 1987; Jenkins, Deno, & Mirkin, 1979). Although standardized achievement tests have several important valid uses, their utility for academic intervention planning is typically very limited.

The use of a broad family of validated curriculum-based tools is likely to substantively and suitably inform decisions made through consultation. These tools are particularly valuable because they are highly adaptable and materials can be developed to examine skills in as much detail as appears warranted. For each of the big consultation questions, data collected through curriculum-based measurement (CBM), curriculum-based assessment (CBA), or Curriculum-Based Evaluation (CBE, Howell & Nolet, 2000) are likely to provide consultants and consultees information that will allow for objectivity in verification of problems as well as monitoring of progress following intervention implementation.

In reading, three 1-min reading probes will provide a median words correct per minute measure, as well as an error count. If the student's oral reading fluency is low compared to established grade level standards or peers' measures, and/or accuracy is low, choices include interventions to enhance fluency and phonics or decoding instruction in appropriate level material (Shinn, 1989). In mathematics, CBM will provide digits correct per minute on either specific skill probes or mixed computation probes. For students who complete insufficient numbers of basic skill problems, or for whom accuracy is low, fluency building on those basic skills would be appropriate. For students who do not complete mixed computation probes at a level that is similar to their peers, additional assessment might be called for to determine whether the observed deficits result from inadequate basic skill attainment. Although written expression may be evaluated by having students write a short passage in response to a prompt, the utility of curriculum-based measures like total number of words written or correct word sequences is less obvious for intervention planning. They will suggest general areas for remediation, but will provide less specific information than is likely to be needed for an effective intervention. For written expression and for problems in reading and mathematics, Curriculum-Based Evaluation (CBE) may provide a framework through which specific skills may be addressed and remediated through a school-wide system of problemsolving and intervention (Howell, Kurns, & Antil, 2002; Howell & Nolet, 2000). CBE is a data-driven, systematic procedure for measuring what, specifically, is deficient in the basic skill areas. It then uses those data to make specific recommendations for teaching and remediating skills problems.

Research has demonstrated a strong link between academic achievement and classroom behavior (e.g., Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000; Malecki & Elliott, 2002; Wentzel, 1993). Although student behavior in and out of the classroom is clearly an important issue for success in school and may be the teacher's primary presenting concern during initial consultation, it may not be sensible to make student behavior the focus of intervention until it is determined that the problem

behavior does not occur as the result of an academic issue. In other words, academic deficits should be ruled out before addressing behavior alone. Asking a student to be still, to be quiet, and to engage in academic work when the student lacks the skills needed to complete the work successfully is certainly a formula for the reemergence of the concern that was initially addressed and has little instructional utility (Kelley, Reitman, & Noell, 2002). Evaluation of academic skills is inexorably tied to curriculum levels. It is impossible to judge how the student *is performing* without having some idea of the level at which the student is *supposed to be* performing. Curriculum-based methods can provide both of these kinds of data and can effectively inform decisions at each of the levels of big consultation questions.

Problem screening. Screening is conducted to determine if students need help to succeed in the general curriculum. Given the serious and often devastating consequences of waiting for students to fail before providing academic assistance (Donovan & Cross, 2002; Elliott, Huai, & Roach, 2007), good screening instruments are essential to providing proactive identification of students at risk for failure. Curriculum-based measurement (CBM) was designed to provide special education teachers with valid measurements of student performance that can be administered on a repeated basis for progress monitoring (Bradley & Ames, 1977; Christ & Silberglitt, 2007; Deno, Marston, & Tindal, 1985), but can also function effectively as a screening measure either alone or as part of a larger system (Elliott et al.; Shinn, 1988).

Screening may take the form of informal review of students' work, in which the teacher decides, using clinical judgment, whether the students' skills are in need of remediation. Although data suggest that when provided a structure for making judgments, teachers may provide accurate information about student skills compared to criterion measures, it is critical that this structure be part of their decision-making process (Elliott et al., 2007). It would, however, be unusual to find this kind of structure provided to teachers for screening. Alternatively, routinely administered group standardized achievement tests provide information regarding how student scores compare to those of students in similar grade or age ranges. Although they can provide information regarding these comparisons, they are limited in their capacity to provide valid recommendations for target skills or intervention procedures, or treatment validity (Cone, 1989; Hayes et al., 1987). They are primarily useful for identifying students whose skills and behavior warrant further assessment.

Data collected systematically within schools tend to have better demonstrated treatment validity and utility for monitoring the progress of intervention. Dynamic Indicators of Basic Early Literacy Skills (DIBELS, Good & Kaminski, 2002) is a series of brief probes in a number of early reading skill areas. They have been demonstrated to be linked to criterion measures of academic achievement. DIBELS provides benchmarks for progress for students at three to four points each year in kindergarten through the 6th grade year. The system is designed so that all students are regularly screened, and those whose scores do not fall in the acceptable range relative to benchmarks and/or other students' scores will naturally come to the attention of the school, either for further assessment or for intervention. Oral reading fluency, nonsense word fluency, and phoneme segmentation fluency are some of the measures that are available through DIBELS screening.

System to Enhance Educational Performance (STEEP) began as Screening to Enhance Equitable Placement or Performance, and provided a system to screen all students for academic deficits in basic skill areas, and provided decision rules for determining what intervention activities would be implemented at different stages in the process (VanDerHeyden, Witt, & Gilbertson, 2007). All students are screened using CBM probes, a smaller group is identified to participate in further intervention, and a still smaller group is identified for individual interventions. The predictive power estimates of STEEP have been found to be better than teacher nomination as a screening source (VanDerHeyden & Witt, 2005). The underlying model for STEEP is based on routinely screening all students, relying primarily on objective data in the form of brief class wide screening assessments to make decisions, and providing

progressively more intensive intervention to students who are at risk. STEEP also, places a major emphasis on differentiating between individual and class wide problems, with the goal of focusing on class wide level issues when that is appropriate.

In addition to formal screening packages, CBM probes may be administered to all of the students in a class, school, or district, and cut scores determined for further assessment and/or intervention. CBM was originally designed to provide special education teachers with a time-efficient assessment of student performance that could be administered repeatedly to quantify the effects of instruction (Bradley & Ames, 1977; Christ & Silberglitt, 2007; Deno, 1989; Deno et al., 1985). As it grew in popularity however, schools chose to gather data on larger groups like classrooms and schools so that the performance of those students who came to the attention of teachers because they were struggling in basic skill areas could be compared to the performance of those larger groups (Shinn, 1988). The data from the larger form norms for those buildings or classes, and provide a standard for evaluating individual students' performance (Stewart & Kaminski, 2002).

As skills-based data like CBM and DIBELS are collected for screening purposes, they may provide information regarding how the students' skills compare to those of their local peers, and therefore, may suggest curriculum that is appropriate to those students' levels of functioning. For example, a second grade student who reads 15 words correct per minute in second grade material at the start of the academic year is likely to fall far below his peers and below the DIBELS benchmark for second grade (< 26 would suggest that the student is at risk, Good & Kaminski, 2002). This would indicate further assessment and or curriculum modification.

Problem specification in detail: What is the problem? As suggested by screening data, more detailed assessment of the specific skills that support competent academic achievement must be completed. However, a quality evaluation will address factors other than academic skills in isolation, as the context of instruction is directly related to the student's success (Shapiro, 1989). Daly and colleagues (1997) suggest five reasonable hypotheses for academic deficits: they are functional explanations for why students fail, or suggest reasons for why for the observed behaviors occur. These hypotheses focus on factors that are external to the child and can be directly manipulated, and if confirmed, they direct resulting intervention toward better arrangement of the instructional environment, better sequencing of the delivery of instruction, better opportunities for responding to instruction, or better arrangement of contingencies (Daly et al.).

Curriculum-based assessment (CBA) is the collection of data that will allow consultants, together with consultees, to develop plausible hypotheses for why academic problems have occurred for a student. Data collected through CBA will describe skills, environment, and student behaviors that contribute to academic performance (Shapiro, 1989): specific antecedents and consequences of behavior, global details regarding daily events in classrooms (Sulzer-Azaroff & Mayer, 1991), and student performance within the specific curricula (Salvia, Ysseldyke, & Bolt, 2007).

Teacher interviews should address a variety of factors. Issues external to the student would include the curriculum in use in the classroom, performance of peers, instructional procedures, progress monitoring procedures, and contingencies for excellent, adequate, and poor performance. Student-centered issues would include student behavior during different kinds of instruction (small-group, large-group, independent seatwork), as well as behavior in response to common classroom contingencies. Direct observation of the student's work habits as well as of co-occurring conditions that may be relevant to demonstration of student skills may inform the development of hypotheses regarding skills problems. For example, if computation accuracy is a concern, observation of the student during independent seatwork in mathematics may be indicated to determine whether the student spends enough academic engaged time to sufficiently attend to the assignment and to accurately complete it. A description of

direct observation systems may be found in Salvia, Ysseldyke, and Bolt (2007) and McLoughlin and Lewis (2008). Cooper, Heron, and Heward (2007) provide a more detailed description of direct observation and behavior analysis. *Permanent products* are the raw data that are generated as a result of activities in the classroom. Review of permanent products will provide information such as whether the student completes assignments in the various content areas, follows directions, and has skills sufficient to competently complete academic tasks. Review of *curriculum-based measurement (CBM)* data will provide additional information regarding where the student's skills stand in relation to those of a group, class, school, or district.

Information collected through CBA will allow the consultant and consultee to determine how the student is functioning within the curriculum, relative to the teacher's expectations, and relative to other students. It may also suggest appropriate levels of curriculum for instructing the student, and/or procedures to follow that may ameliorate the problems that have been suggested by the CBA. However, it may also be the case that additional information is needed and must be collected before a decision can be made regarding an intervention with a high-probability for success.

Problem function: What should be done about the problem? Functional assessment procedures are generally used to determine the effects of environmental changes on behavior. Carr and Durand (1985) and Iwata and colleagues (1982) originally used these procedures with individuals with significant developmental disabilities and severe challenging behavior to investigate the impact of contingencies on these behaviors. However, these procedures have been shown useful in academic environments with the demonstration of the relationships between academic behaviors, antecedent instructional variables, and reinforcing consequences (Daly & Martens, 1994; Pereira & Winton, 1991).

In their discussion of functional assessment for academic performance, Daly and colleagues (1997) suggest five reasonable hypotheses for why students fail and what can be done about them. They include lack of motivation; insufficient responding in curricular materials; not enough help in the form of prompting and feedback, insufficient practice, or lack of generalization; instructional demands that do not align with mastery of the curriculum; and instruction at a level that is not matched to the student's skill. Although functional assessment is not always necessary for an effective intervention to be designed for academic deficits, it can clear up some of the confusion regarding why students do not perform up to teachers' expectations, and is another source of information that may directly inform the development of interventions (Noell & Gansle, in press).

A variety of assessments may be used to provide information relevant to functional hypotheses for academic behavior. First, it is possible that the academic difficulties the student is experiencing are a result of a skill deficit, a lack of skills, or a performance deficit, environmental contingencies insufficient to occasion performance (Noell et al., 1998). Duhon and colleagues (2004) demonstrated the use of brief functional analysis procedures with goal setting and rewards to determine if skill or performance deficits were responsible for observed academic problems in mathematics accuracy, reading fluency, or writing fluency. In assessment, a reward is determined that has a high probability of being a reinforcer for that student. Usually, the person doing the assessment will use a reward that has been effective in the past, or will ask the student what he or she might like to do or have consequent to excellent or adequate academic performance, from a short menu of choices. This is set as the reward for performance. Assessment of skills using this reward for performance at a particular curricular levelthen begins. If the student does not demonstrate adequate performance despite the presence of what has been determined to be one or more potent reinforcers, it is determined that the student has a skill deficit and cannot perform adequately in that level of curriculum. This suggests that either curriculum must be altered or instruction changed to meet that student's needs. If the student does demonstrate adequate performance in the presence of contingent reward but not without that reward, the student has a performance deficit. This suggests that contingencies for performance be put in place to support the demonstration of academic skills (Noell,

Freeland, Witt, & Gansle, 2001).

In consultation, the results of this kind of assessment can advise teachers regarding appropriate choice of curricula. Once a distinction is made between a skill and performance deficit, it is possible to determine whether the curriculum level is appropriate. If a performance deficit is evident, then the current curriculum or one that is more challenging would appear to appropriate for instructing that student. Further assessment in the presence of a potent reward would allow the consultant and consultee to make decisions regarding the appropriate level of curriculum for the student. However, in the case of a skill deficit, additional information should be gathered before making decisions regarding intervention choices.

When it has been determined that the student does not have the basic academic skills in question, further assessment can be done to determine with more detail exactly which skills the student does and does not have. Are the observed problems the result of generalized poor performance or the result of specific skill deficits that could be remediated with individualized instruction? CBM can be used to begin to gather some of this information, and it is possible that if CBM was used for screening, this information is already in the possession of the consultant, consultee, or school.

It is possible that a problem that is judged to be a skill deficit may further be difficulty with engaging in sustained active accurate academic responding (AAA). AAA responding is important for increasing fluency, automaticity, and maintenance of academic skills (Skinner, Pappas, & Davis, 2005). Skinner et al. describe four reasons why students can't engage in the AAA responding which is so important for developing automaticity of skills: (a) they do not have the required materials, (b) they do not understand the assignment, (c) they do not have sufficient time to respond to prompts or instruction, and/or (d) they do not have the required skills. If the difficulties the students experience are the result of the first three, it is likely that this information would be made clear through CBA and appropriate interventions can be developed based on those target concerns. However, for students who have not been taught and/or who have not yet learned the required skills, additional assessment is likely to provide information relevant to intervention planning.

We've decided what to do, now how do we actually get it done?

Due to the nature of consultation and the fact that psychologists do not have sufficient time to provide direct services to all referred students, interventions are rarely designed to be implemented by the consultant who works with the consultee to design them. The consultant must be sufficiently skilled to influence the behavior of the *consultee* so that he can effectively implement the intervention with the student (Noell et al., 2005). Although a naïve observer might expect that teachers will implement interventions because they have been asked to, substantial literature exists that in reality, the many competing demands of teachers' environments can readily lead to poor implementation of even simple interventions (Noell et al., 2000; Noell et al., 2005). For example, Jones, Wickstrom, and Friman (1997) found that without intervention, teacher implementation of a reinforcement strategy for on-task behavior ranged between 9% and 37%. The effort that consultants and consultees must spend to design interventions for children in need should not be wasted by inadequate implementation. Indeed, different strategies have been used to improve teachers' implementation of interventions. One that has enjoyed substantial success is performance feedback.

Performance feedback in the context of consultation has commonly consisted of the consultant meeting with the consultee, reviewing intervention implementation, reviewing student behavior, graphing both outcomes, praising accurate implementation, discussing barriers to plan implementation, and planning for problems that have arisen (Mortenson & Witt, 1998; Noell et al., 2000). The consultant provides positive feedback regarding intervention steps completed correctly and identifies intervention steps that are missed or completed incorrectly (Noell et al., 2005). The consultant then discusses steps

that were not implemented or implemented incorrectly. This procedure has been demonstrated to be effective with teachers when implemented daily until the teacher implemented with 100% integrity, then thinned to two days, and then weekly (Noell et al.). There are other methods of improving consultees' implementation of interventions such as social influence, but to date, performance feedback has shown the best results, with positive effects on student behavior and teacher implementation when compared with procedures like checking in with the teacher to discuss implementation with no formal review of data.

How do we determine whether we have achieved the goals set in consultation?

CBM can provide both formative and summative data for the purposes of identification, problem definition, intervention design, and intervention evaluation. It is essential that the progress of interventions be monitored to determine whether they are working or if they need to be changed in some way to better meet students' needs. Response to Intervention (RtI) models are increasingly recommended as system-wide procedures for allocating the wide variety of resources available in schools to all of the students who need them (Jimerson, Burns, & VanDerHeyden, 2007). Unlike traditional systems in which students are only targeted for intervention when they have failed (Donovan & Cross, 2002), in RtI, students progress through a multi-tiered model of assessment and intervention. As students' needs demand, increasingly intense, explicit, frequent, or long-term services are provided (Fuchs, Mock, Morgan, & Young, 2003). The data collected through a RtI model can provide evidence to recommend additional assessment, to support the effectiveness of intervention, to indicate alternative intervention, and/or to establish eligibility for special services. CBM is uniquely situated to contribute to all of those decisions.

Summary and Conclusions

Indirect service delivery through consultation allows many more students with special needs to receive services than if direct service delivery through a school psychologist were the only option available. School psychologists have risen to the challenge of providing services in such a manner, with many reporting that they would prefer to increase the amount of time they spend providing consultative services to teachers (Cheramie & Sutter, 1993; Costenbader et al. 1992; Hatzichristou, 1998; Kratochwill & Stoiber, 2000; Reschly & Wilson, 1995; Roberts & Rust, 1994; Stewart, 1986). Through consultation regarding academic issues, consultants and consultees may collect a variety of data that will inform screening, assessment, and intervention development. Many of these activities, especially when they provide skills information about the students who are assessed, will allow for decisions to be made regarding the appropriate level at which to instruct students. For intervention development, teachers are the direct agents of change for students with academic problems, and may need additional support to provide services. One of the biggest problems with implementing interventions for teachers is that there are too many competing demands on their time to allow them to implement with 100% integrity. Indeed, many may need assistance providing these services. One empirically supported method for increasing intervention integrity for those developed in consultation with teachers is performance feedback. When teachers are exposed to data-based evaluation of student progress as well as their own implementation of intervention components, their implementation tends to improve. Evaluation of intervention success through progress monitoring will allow the intervention team to determine success or failure, and whether to alter the intervention or focus on establishment of eligibility for special education services.

References

Bradley, M. M., & Ames, W. S. (1977). Readability parameters of basal readers. Journal of *Reading Behavior*, 11, 175-183.

Bradley-Johnson, S., & Dean, V. J. (2000). Role change for school psychology: The challenge continues

- in the new millennium. Psychology in the Schools, 37, 1-5.
- Bramlett, R. K., Murphy, J. J., Johnson, J., Wallingsford, L., & Hall, J. D. (2002). Contemporary practices in school psychology: A national survey of roles and referral problems. *Psychology in the Schools*, *39*, 327-335.
- Caplan, G., Caplan, R. B., & Erchul, W. P. (1995). A contemporary view of mental health consultation: Comments on "Types of Mental Health Consultation" by Gerald Caplan (1963). *Journal of Educational and Psychological Consultation*, *6*, 23-30.
- Caprara, G., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. (2000). Prosocial foundations of children's academic achievement. *Psychological Science*, *11*, 302-306.
- Carr, E. G., & Durand, V. M. (1985). Reducing behavior problems through functional communication training. *Journal of Applied Behavior Analysis*, 18, 111-126.
- Cheramie, G., & Sutter, E. (1993). Role expansion in school psychology: The need for primary and secondary prevention services. *Psychology in the Schools*, *30*, 53-59.
- Christ, T. J., & Silberglitt, B. (2007). Estimates of the standard error of measurement for curriculum-based measures of oral reading fluency. *School Psychology Review*, *36*, 130-146.
- Cone, J. D. (1989). Is there utility for treatment utility? *American Psychologist*, 44, 1241-1242.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Costenbader, V., Swartz, J., & Petrix, L. (1992). Consultation in the schools: The relationship between preservice training, perception of consultative skills, and actual time spent in consultation. *School Psychology Review*, 21, 95-108.
- Curtis, M. J., Grier, J. E. C., & Hunley, S. A. (2004). The changing face of school psychology: Trends in data and projections for the future. *School Psychology Review*, *33*, 49-66.
- Curtis, M. J., Hunley, S. A., & Grier, E. C. (2004). The status of school psychology: Implications of a major personnel shortage. *Psychology in the Schools*, *41*, 431-442.
- Daly, E. J. III, Witt, J. C., Martens, B. K., & Dool, E. J. (1997). A model for conducting a functional analysis of academic performance problems. *School Psychology Review*, 26, 554-574.
- Daly, E. J., III, & Martens, B. K. (1994). A comparison of three interventions for increasing oral reading performance: Application of the instructional hierarchy. *Journal of Applied Behavior Analysis*, 27, 459–469.
- Demaray, M. K., & Elliott, S. N. (1998). Teachers' judgments of students' academic functioning: A comparison of actual and predicted performances. *School Psychology Quarterly*, *13*, 8-24.
- Deno, S. L. (1989). Curriculum-based measurement and special education services: A fundamental and direct relationship. In M. R. Shinn (Ed.), *Curriculum-based measurement: Assessing special children* (pp. 1-17). New York: Guilford Press.
- Deno, S. L., Marston, D., & Tindal, G. (1985). Direct and frequent curriculum-based measurement: An

- alternative for educational decision making. Special Services in the Schools, 2, 5-27.
- Donovan, M. S., & Cross, C. T. (Eds.). (2002). *Minority students in gifted and special education*. Washington, DC: National Academy Press.
- Duhon, G. J., Noell, G. H., Witt, J. C., Freeland, J. T., Dufrene, B. A., & Gilbertson, D. N. (2004). Identifying academic skill and performance deficits: The experimental analysis of brief assessments of academic skills. *School Psychology Review*, *33*, 429-443.
- Dwyer, K. P., & Bernstein, R. (1998). Mental health in the schools: "Linking islands of hope in a sea of despair." *School Psychology Review*, 27, 277-286.
- Elliott, S. N., Huai, N., & Roach, A. T. (2007). Universal and early screening for educational difficulties: Current and future approaches. *Journal of School Psychology*, 45, 137-161.
- Fuchs, D., Mock, D., Morgan, P. L., & Young, C. L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice*, 18, 157-171.
- Good, R. H., & Kaminski, R. A. (2002). *Dynamic indicators of basic early literacy skills* (6th ed.). Longmont, CO: Sopris West.
- Gutkin, T. B. (1996). Patterns of consultant and consultee verbalizations: Examining communication leadership during initial consultation interviews. *Journal of School Psychology*, *34*, 199-219.
- Hatzichristou, C. (1998). Alternative school psychological services: Development of a databased model. *School Psychology Review*, 27, 246-259.
- Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. *American Psychologist*, 42, 963-974.
- Heward, W. L. (2006). *Exceptional children: An introduction to special education* (8th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Hoge, R. D., & Coladarci, T. (1989). Teacher-based judgments of academic achievement: A review of the literature. *Review of Educational Research*, 76, 777-781.
- Howell, K. W. & Nolet, V. (2000). *Curriculum-based evaluation: Teaching and decision making* (3rd Ed.). Atlanta, GA: Wadsworth.
- Howell, K. W., Kurns, S. & Antil, L. (2002). Best practices in curriculum-based evaluation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 753-772). Bethesda, MD. National Association of School Psychologists.
- Ikeda, M. J., Tilly, W. D., Stumme, J., Volmer, L., & Allison, R. (1996). Agency-wide implementation of problem solving consultation: Foundations, current implementation, and future directions. *School Psychology Quarterly*, 11, 228-243.
- Individuals with Disabilities Education Improvement Act of 2004 (IDEA), 118 Stat. 2647 (2004). [Amending 20 U.S.C. §§ 1400 *et seq.*].

- Iwata, B. A., Dorsey, M., Silfer, K., Bauman, K., & Richman, G. (1982). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197-209.
- Jenkins, J. R., Deno, S. H, & Mirkin, P. K. (1979). Measuring pupil progress toward the least restrictive alternative. *Learning Disability Quarterly*, *4*, 81-91.
- Jimerson, S. R., Burns, M. K., & VanDerHeyden, A. M. (2007). Response to intervention at school: The science and practice of assessment and intervention. In S. R. Jimerson, M. K. Burns, & A. M. VanDerHeyden, (Eds.), *Handbook of response to intervention: The science and practice of assessment and intervention* (pp. 3-9). New York, NY: Springer.
- Jones, K. M., Wickstrom, K. F., & Friman, P. C. (1997). The effects of observational feedback on treatment integrity in school-based behavioral consultation. *School Psychology Quarterly*, *12*, 316-326.
- Kavale, K. A., & Forness, S. R. (2000). History, rhetoric and reality: Analysis of the inclusion debate. *Remedial and Special Education*, *21*, 279-296.
- Kelley, M. L., Reitman, D., & Noell, G. H. (2002). *Practitioner's guide to empirically based measures of school behavior*. New York: Kluwer Academic/Plenum Publishers.
- Kratochwill, T. R., & Stoiber, K. C. (2000). Uncovering critical research agendas for school psychology: Conceptual dimensions and future directions. *School Psychology Review*, *29*, 591-603.
- Malecki, C. K., & Elliott, S. N. (2002). Children's social behaviors as predictors of academic achievement: A longitudinal analysis. *School Psychology Quarterly*, 17, 1-23.
- McLoughlin, J. A., & Lewis, R. B. (2008). *Assessing students with special needs* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Mortenson, B. P., & Witt, J. C. (1998). The use of weekly performance feedback to increase teacher implementation of a prereferral academic intervention. *School Psychology Review*, 27, 613-627.
- No Child Left Behind Act of 2001, 20 U.S.C. 70 § 701 et seq.
- Noell, G. H., & Gansle, K. A. (in press). Introduction to functional behavioral assessment. In K. A. Akin-Little, S. G. Little, M. Bray, & T. Kehle (Eds.), *Handbook of behavioral interventions in schools*. Washington, DC: American Psychological Association.
- Noell, G. H., Freeland, J. T., Witt, J. C., & Gansle, K. A. (2001). Using brief assessments to identify effective interventions for individual students. *Journal of School Psychology*, *39*, 335-355.
- Noell, G. H., Gansle, K. A., & Allison, R. (1999). Do you see what I see? Teachers' and school psychologists' evaluations of naturally occurring consultation cases. *Journal of Educational and Psychological Consultation*, 10, 107-128.
- Noell, G. H., Gansle, K. A., Witt, J. C., Whitmarsh, E. L., Freeland, J. T., LaFleur, L. H., Gilbertson, D. N., & Northup, J. (1998). Effects of contingent reward and instruction on oral reading performance at differing levels of passage difficulty. *Journal of Applied Behavior Analysis*, 31, 659-663.

- Noell, G. H., Witt, J. C., LaFleur, L. H., Mortenson, B. P., Ranier, D. D., & LeVelle, J. (2000). A comparison of two follow-up strategies to increase teacher intervention implementation in general education following consultation. *Journal of Applied Behavior Analysis*, *33*, 271-284.
- Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K. L., Koenig, J. L., Resetar, J. L., & Duhon, G. J. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. *School Psychology Review*, *34*, 87-106.
- Pereira, J. A., & Winton, A. S. W. (1991). Teaching and remediation of mathematics: A review of behavioral research. *Journal of Behavioral Education*, 1, 5–36.
- Reschly, D. J., & Wilson, M. S. (1995). School psychology practitioners and faculty: 1986 to 1991-92; Trends in demographics, roles, satisfaction, and system reform. *School Psychology Review*, 24, 62-80.
- Roberts, A. H., & Rust, J. O. (1994). Role and function of school psychologists, 1992-93: A comparative study. *Psychology in the Schools, 31,* 113-119.
- Salvia, J., Ysseldyke, J. E., & Bolt, S. (2007). *Assessment in special and inclusive education* (10th ed.). Boston, MA: Houghton Mifflin.
- Sechrest, L. (1982). Program evaluation: The independent and dependent variables. *The Counseling Psychologist*, 10, 73-74.
- Shapiro, E. S. (1989). *Academic skills problems: Direct assessment and intervention*. New York: Guilford.
- Sheridan, S., Welch, M., & Orme, S. (1996). Is consultation effective? A review of outcome research. *Remedial and Special Education*, 17, 341-354.
- Shinn, M. R. (1988). Development of curriculum-based local norms for use in special education decision-making. *School Psychology Review*, 17, 61-80.
- Shinn, M. R. (1989). Curriculum-based measurement: Assessing special children. New York: Guilford.
- Shippen, M. E., Houchins, D. E., Calhoon, M. B., Furlow, C. F., & Sartor, D. L. (2006). The effects of comprehensive school reform models in reading for urban middle school students with disabilities. *Remedial and Special Education*, 27, 322-328.
- Skinner, C. H., Pappas, D. N., & Davis, K. A. (2005). Enhancing academic engagement: Providing opportunities for responding and influencing students to choose to respond. *Psychology in the Schools*, 42, 389-403.
- Stewart, K. J. (1986). Innovative practice of indirect service delivery: Realities and idealities. *School Psychology Review*, 15, 466-478.
- Stewart, L. H., & Kaminski, R. (2002). Best practices in developing local norms for academic problem solving. In A. Thomas and J. Grimes (Eds.), *Best practices in school psychology IV* (pp. 737-752). Bethesda, MD: National Association of School Psychologists.
- Sulzer-Azaroff, B., & Mayer, G. R. (1991). Behavior analysis for lasting change. Fort Worth, TX: Holt,

Rinehart and Winston, Inc.

- VanDerHeyden, A. M., & Witt, J. C. (2005). Quantifying context in assessment: Capturing the effect of base rates on teacher referral and a problem-solving model of identification. *School Psychology Review*, *34*, 161-183.
- VanDerHeyden, A. M., Witt, J. C., & Gilbertson, D. N. (2007). A multi-year evaluation of the effects of a Response to Intervention (RTI) model on identification of children for special education. *Journal of School Psychology*, 45, 225-256.
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Educational Psychology*, 85, 357-364.
- Yeaton, W. H., & Sechrest, L. (1981). Critical dimensions in the choice and maintenance of successful treatments: Strength, integrity, and effectiveness. *Journal of Consulting and Clinical Psychology*, 49, 156-167.

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